FIG. 1

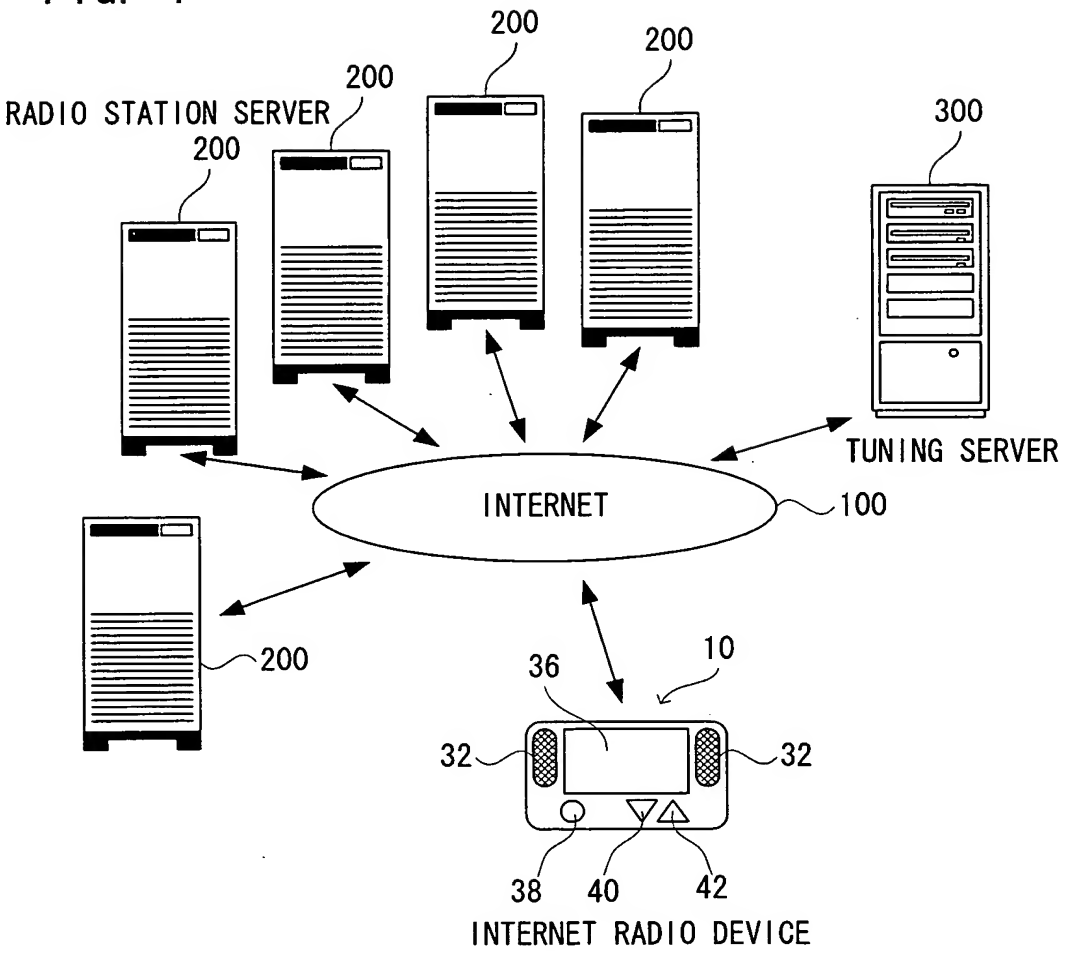

200
200
200
RADIO STATION SERVER
200
300
TUNING SERVER
INTERNET
100
200
10
36
32
32
38
40
42
INTERNET RADIO DEVICE

FIG. 2

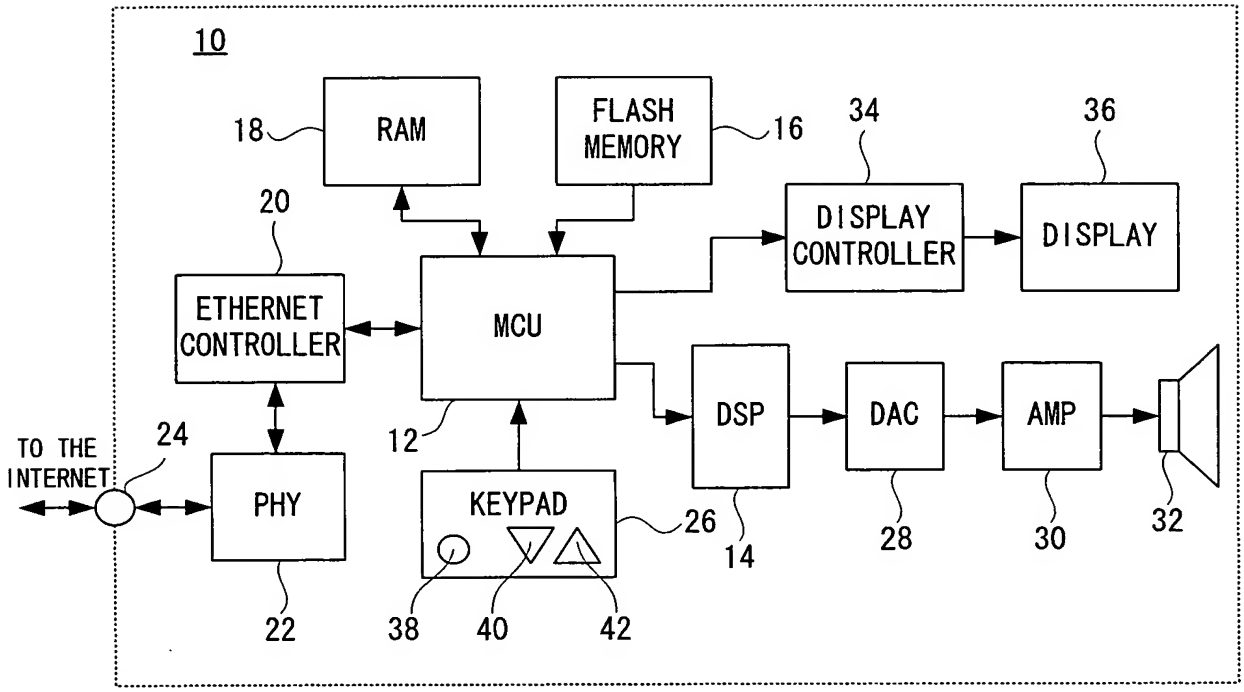

10
18
RAM
FLASH MEMORY
16
34
36
20
DISPLAY CONTROLLER
DISPLAY
ETHERNET CONTROLLER
MCU
DSP
DAC
AMP
TO THE INTERNET
24
PHY
12
KEYPAD
26
14
28
30
32
22
38
40
42

FIG. 3

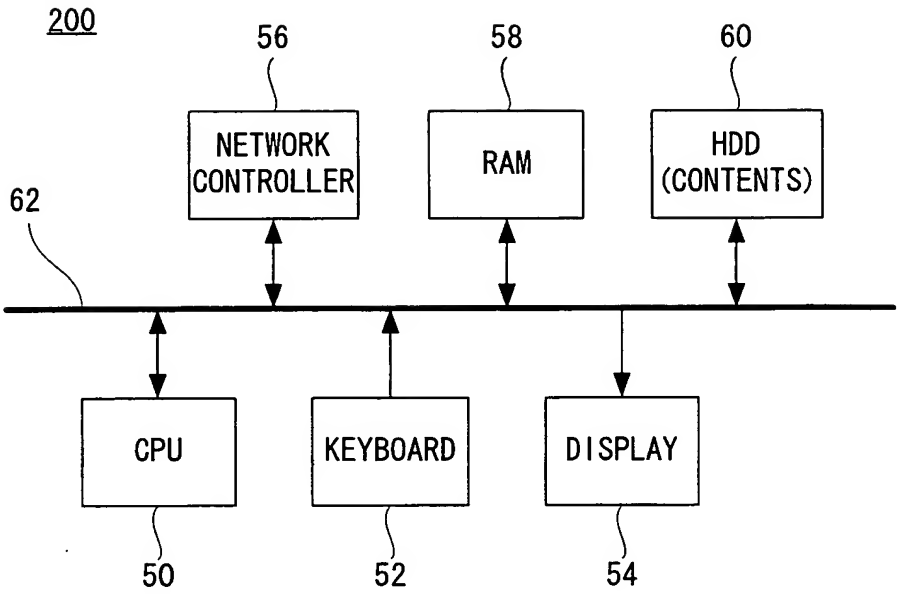

200
56
58
60
NETWORK CONTROLLER
RAM
HDD (CONTENTS)
62
CPU
KEYBOARD
DISPLAY
50
52
54

FIG. 4

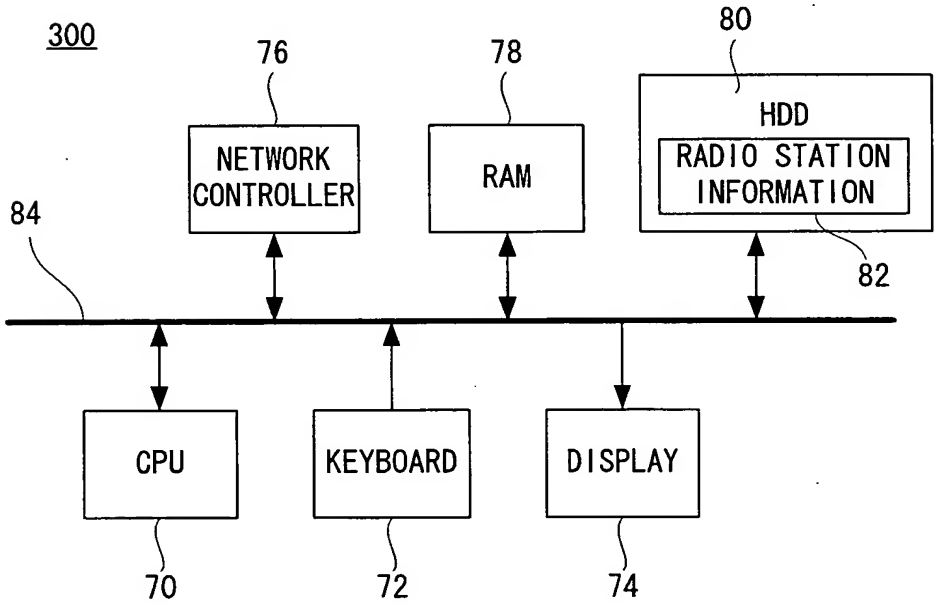
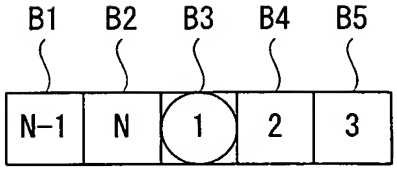

300
76
78
80
NETWORK CONTROLLER
RAM
HDD
RADIO STATION INFORMATION
84
82
CPU
KEYBOARD
DISPLAY
70
72
74

FIG. 5

82 RADIO STATION INFORMATION TABLE

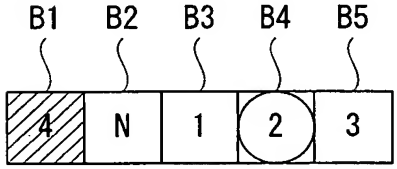
NUMBER	STATION NAME	URL
1	abc···	http://www.abc···
2	ABC···	http://www.ABC···
3	def···	http://www.def···
N−2	pqr···	http://www.pqr···
N−1	PQR···	http://www.PQR···
N	xyz···	http://www.xyz···

FIG. 6 (A)



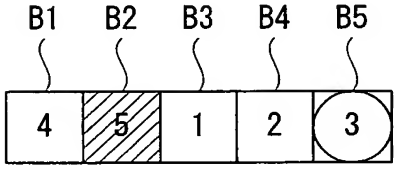
FIRST TIME
(START OF RECEPTION)

FIG. 6 (B)



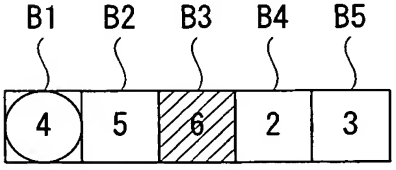
SECOND TIME
(UP THROUGH CHANNELS)

FIG. 6 (C)



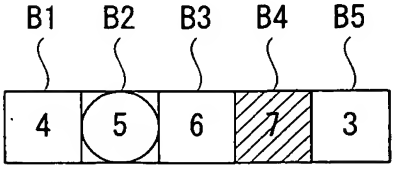
THIRD TIME
(UP THROUGH CHANNELS)

FIG. 6 (D)



FOURTH TIME
(UP THROUGH CHANNELS)

FIG. 6 (E)



FIFTH TIME
(UP THROUGH CHANNELS)

FIG. 7 (A)

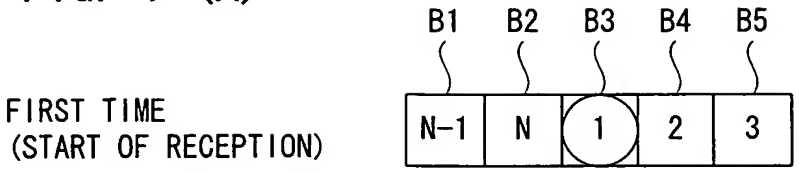


FIG. 7 (B)

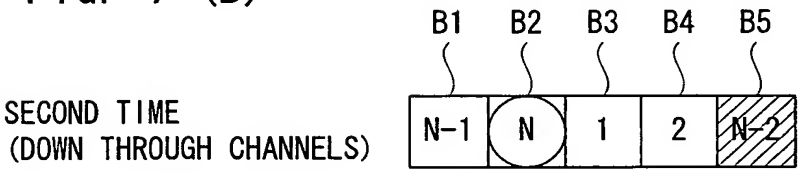


FIG. 7 (C)

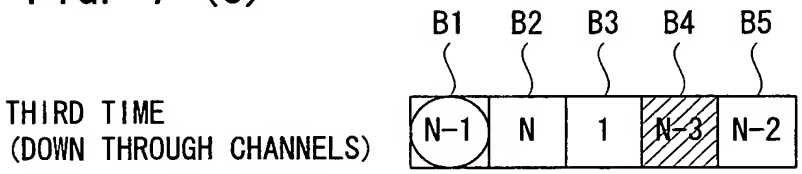


FIG. 7 (D)

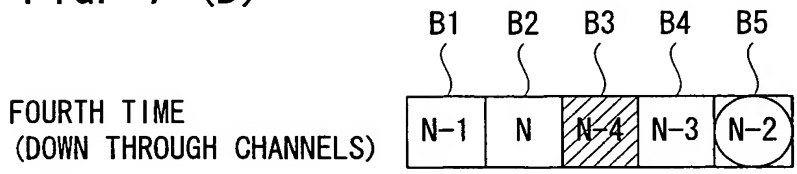


FIG. 7 (E)

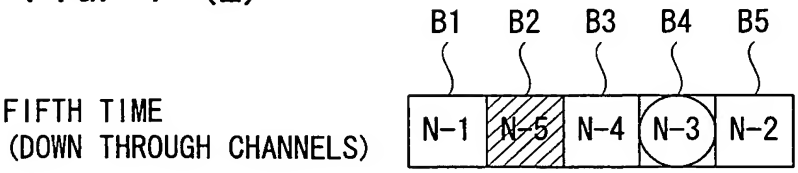


FIG. 8

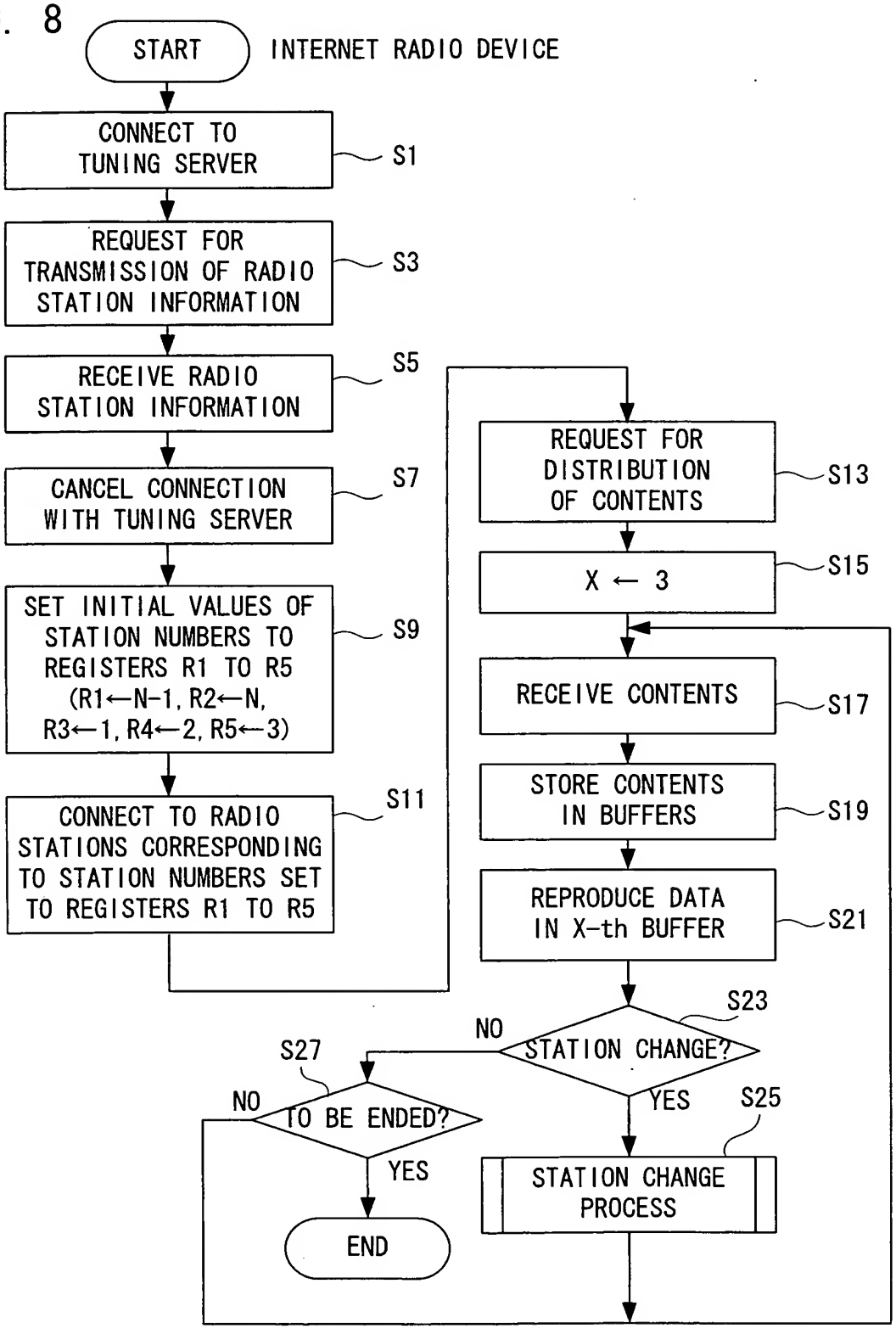

START
INTERNET RADIO DEVICE
CONNECT TO TUNING SERVER
S1
REQUEST FOR TRANSMISSION OF RADIO STATION INFORMATION
S3
RECEIVE RADIO STATION INFORMATION
S5
CANCEL CONNECTION WITH TUNING SERVER
S7
SET INITIAL VALUES OF STATION NUMBERS TO REGISTERS R1 TO R5 (R1←N-1, R2←N, R3←1, R4←2, R5←3)
S9
CONNECT TO RADIO STATIONS CORRESPONDING TO STATION NUMBERS SET TO REGISTERS R1 TO R5
S11
REQUEST FOR DISTRIBUTION OF CONTENTS
S13
X ← 3
S15
RECEIVE CONTENTS
S17
STORE CONTENTS IN BUFFERS
S19
REPRODUCE DATA IN X-th BUFFER
S21
S23
NO
STATION CHANGE?
YES
S25
STATION CHANGE PROCESS
S27
NO
TO BE ENDED?
YES
END

FIG. 9

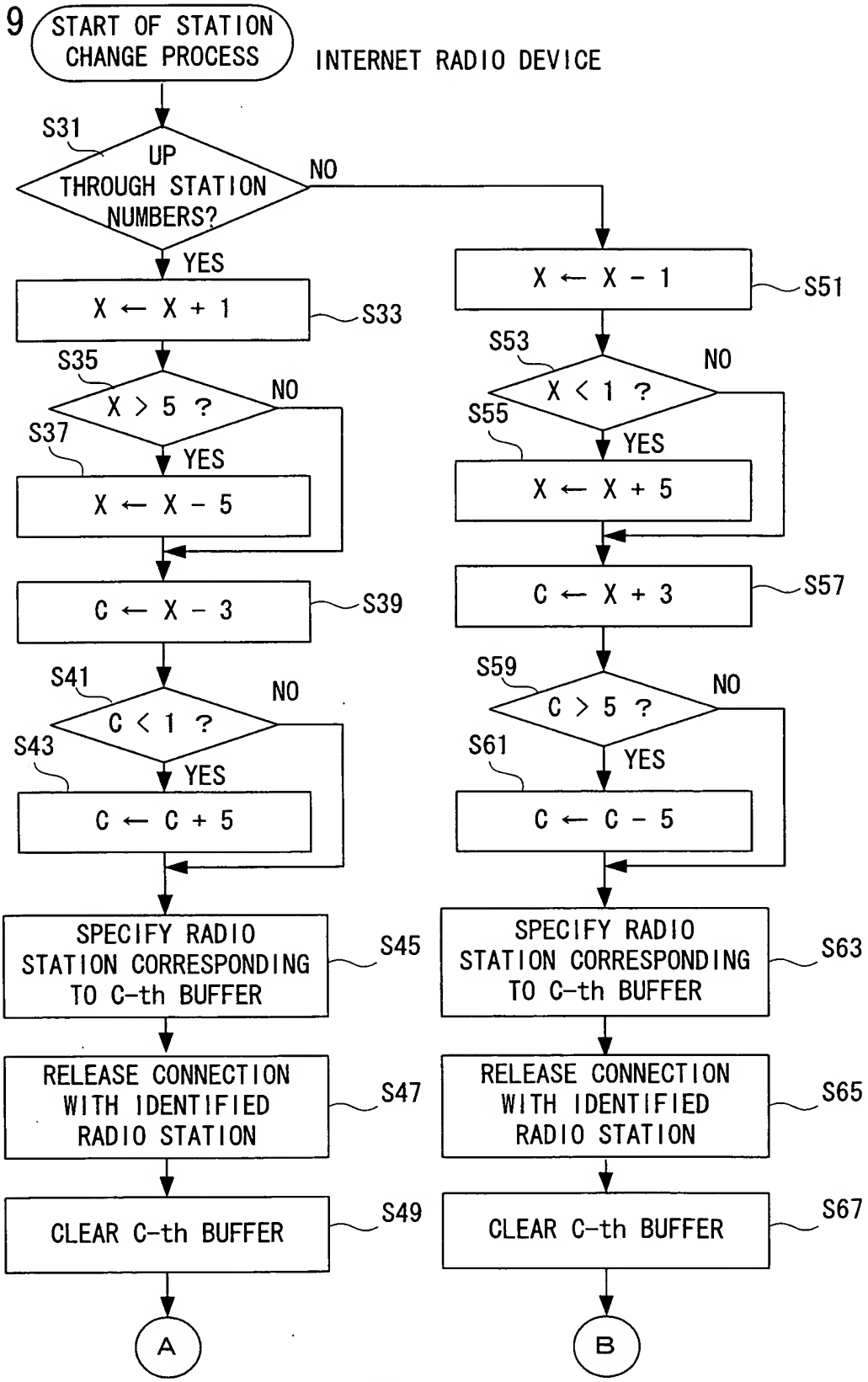

START OF STATION CHANGE PROCESS
INTERNET RADIO DEVICE
S31
UP THROUGH STATION NUMBERS?
NO
YES
X ← X + 1
S33
S35
X > 5 ?
NO
S37
YES
X ← X - 5
C ← X - 3
S39
S41
C < 1 ?
NO
S43
YES
C ← C + 5
SPECIFY RADIO STATION CORRESPONDING TO C-th BUFFER
S45
RELEASE CONNECTION WITH IDENTIFIED RADIO STATION
S47
CLEAR C-th BUFFER
S49
A
X ← X - 1
S51
S53
X < 1 ?
NO
S55
YES
X ← X + 5
C ← X + 3
S57
S59
C > 5 ?
NO
S61
YES
C ← C - 5
SPECIFY RADIO STATION CORRESPONDING TO C-th BUFFER
S63
RELEASE CONNECTION WITH IDENTIFIED RADIO STATION
S65
CLEAR C-th BUFFER
S67
B

FIG. 10

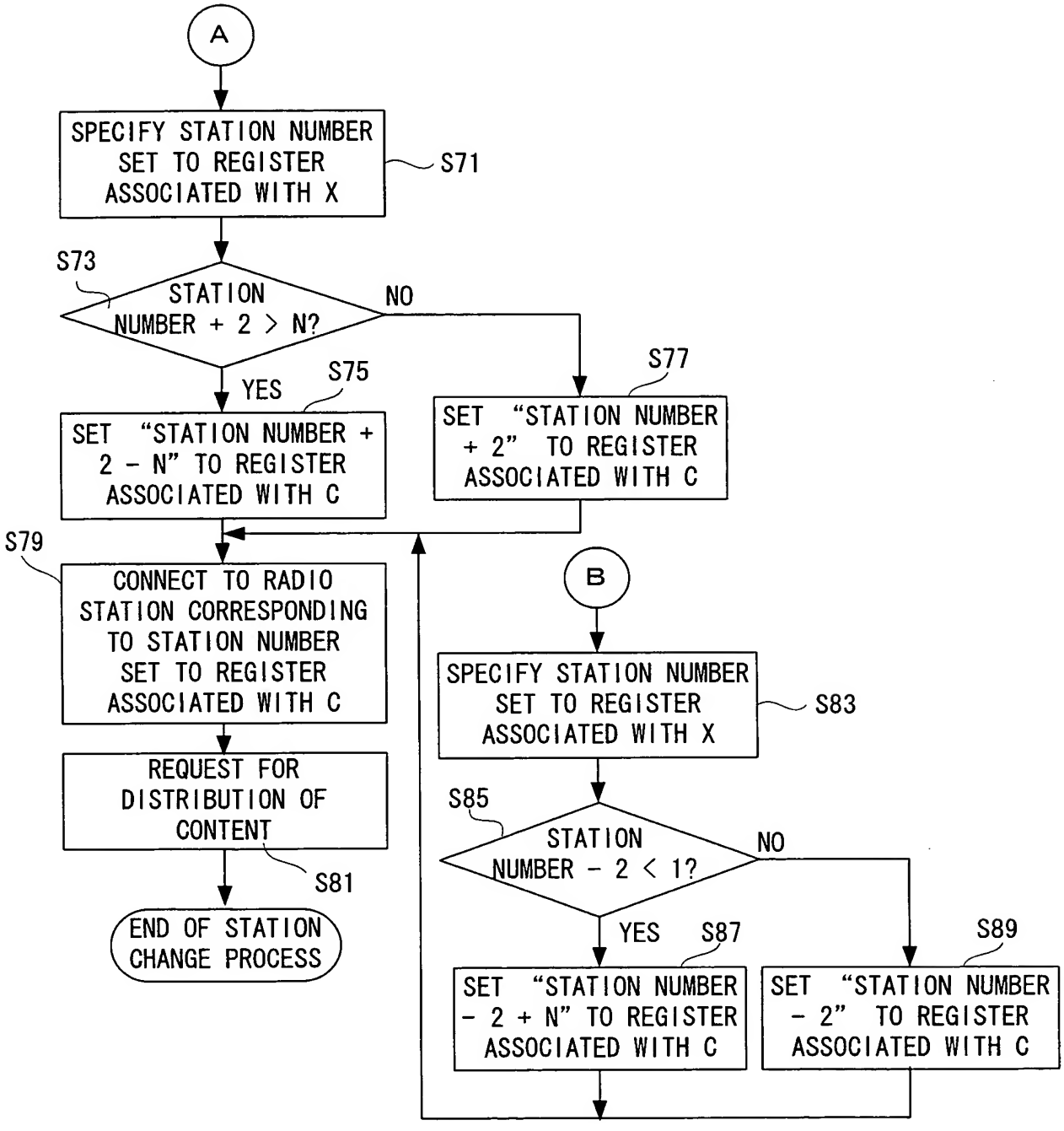

A
SPECIFY STATION NUMBER SET TO REGISTER ASSOCIATED WITH X
S71
S73
STATION NUMBER + 2 > N?
NO
YES
S75
SET "STATION NUMBER + 2 - N" TO REGISTER ASSOCIATED WITH C
S77
SET "STATION NUMBER + 2" TO REGISTER ASSOCIATED WITH C
S79
CONNECT TO RADIO STATION CORRESPONDING TO STATION NUMBER SET TO REGISTER ASSOCIATED WITH C
REQUEST FOR DISTRIBUTION OF CONTENT
S81
END OF STATION CHANGE PROCESS
B
SPECIFY STATION NUMBER SET TO REGISTER ASSOCIATED WITH X
S83
S85
STATION NUMBER - 2 < 1?
NO
YES
S87
SET "STATION NUMBER - 2 + N" TO REGISTER ASSOCIATED WITH C
S89
SET "STATION NUMBER - 2" TO REGISTER ASSOCIATED WITH C

FIG. 11

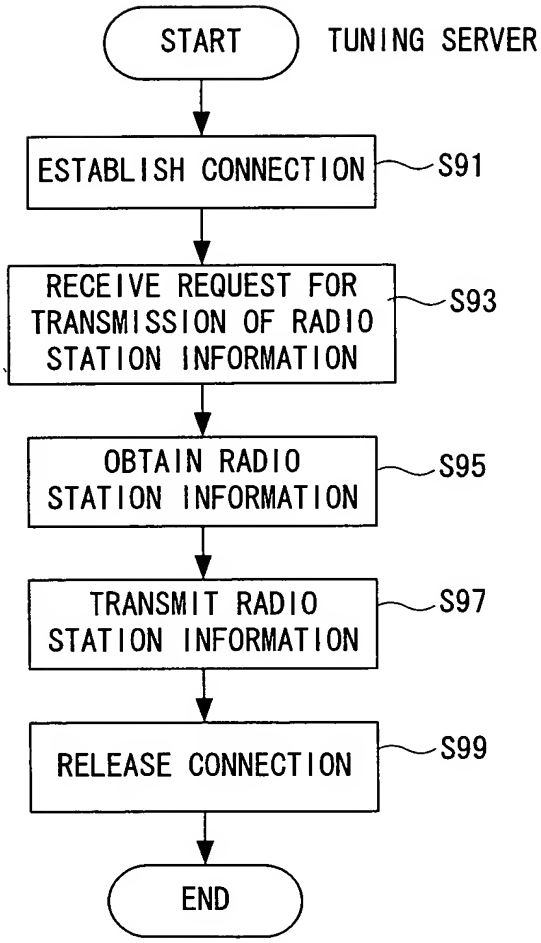
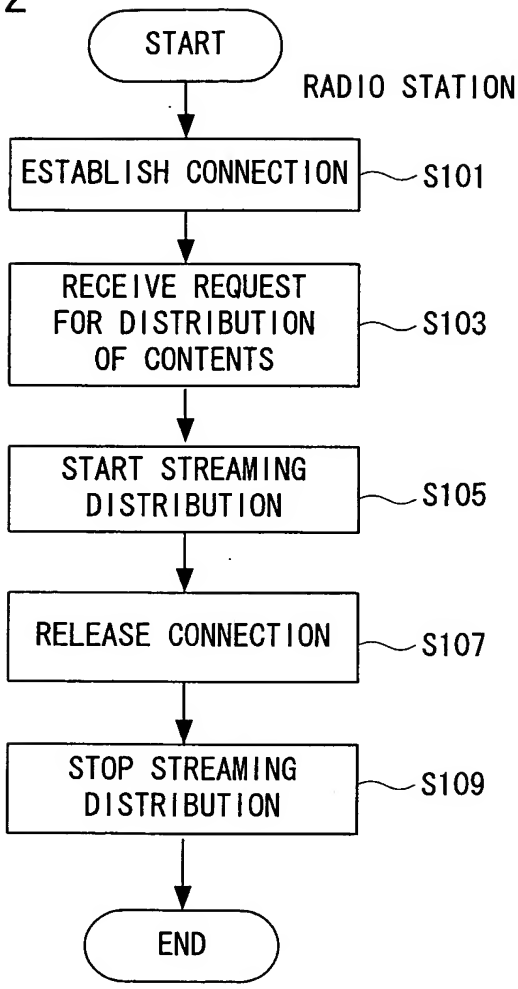

START
TUNING SERVER
ESTABLISH CONNECTION
S91
RECEIVE REQUEST FOR TRANSMISSION OF RADIO STATION INFORMATION
S93
OBTAIN RADIO STATION INFORMATION
S95
TRANSMIT RADIO STATION INFORMATION
S97
RELEASE CONNECTION
S99
END

FIG. 12


START
RADIO STATION SERVER
ESTABLISH CONNECTION
S101
RECEIVE REQUEST FOR DISTRIBUTION OF CONTENTS
S103
START STREAMING DISTRIBUTION
S105
RELEASE CONNECTION
S107
STOP STREAMING DISTRIBUTION
S109
END